### Group II

Simulator

### **Participants**

- Dick Bajura
- Larry Ruth
- James Ciesar
- Mark Bryden
- Dale Keairns

- Jerry Boyle
- Mike Bockelie
- Bendicte Bascle
- John Molburg
- Tom O'Brien

# What has been learned - Simulator needs

- Fast
- Documented degree of accuracy
- Interactive
- Granularity (multiple levels of detail)
- Flexible/extensible (easy to add models)
- Run on desktop and ability to access remote (high end) computer resources

## What has been learned — need to do

- Standardized model interfaces
- Hooks for developing in infobase
  - Process design
  - Real time controls
  - Economics

#### User Interface

- "...Adapt available technology to energyplex needs..."
- Need to adapt new technology as becomes available
- Different levels of details to match user needs
- Input
  - Near term => Conventional I/o devices
  - Long term => adapt to new I/o devices
- Output
  - Tabular,
  - 1D, 2d/3D graphics

### Barriers

- ".... We don't knonw what the usere wants to see...."
- \$\$ of advanced visualization (high end VR)
- What will simulator be used for?
  - Design plant ?
  - Convince investors to build?
  - Need clear direction from DOE

### Next Steps

- Focused, structured meeting of V21 contractors and selected participants
  - model interface s/w issues
  - component model needs